



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,078	06/20/2003	Kenneth Roger Jones	1033-SS00380	7047
60533	7590	12/13/2007		
TOLER LAW GROUP 8500 BLUFFSTONE COVE SUITE A201 AUSTIN, TX 78759			EXAMINER SOL, ANTHONY M	
			ART UNIT 2619	PAPER NUMBER
			MAIL DATE 12/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/601,078

Applicant(s)

JONES ET AL.

Examiner

Anthony Sol

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/28/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's Amendment filed 9/28/2007 is acknowledged.
- The previous objection to the drawing is withdrawn.
- The previous objection to the specification is withdrawn.
- The previous objection to claims 17-19 is withdrawn.
- Claims 1, 2, 9, 12, 16-19 have been amended.
- Claims 1-19 remain pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "status indicator configured to indicate a layer 2 connection status **between** the computer remote to the service provider device" (emphasis added). "Between the computer" and what else?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4-8, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Cerami et al (US 6,981,039 B2).

With respect to claim 1, Cerami discloses a method comprising:

inquiring, from a remote location (proactive network management system 300 of Figure 3 receives alarms in indications of failure and queries the network 102, column 9 line 39 - column 10 line 35), a status of an upper-layer communication indicator wherein the status is retrieved from a remotely located device (soft alarms are failures of the logical network, layers 2 and above of the Open Systems Interconnect (OSI) model, column 10 lines 13-18);

entering the status into data storage (records of the alarms are created and information gathered from the network is stored to be analyzed to determine and isolate the root cause failure, column 9 line 39 - column 10 line 35);

performing a first set of actions when the status indicates valid upper-layer communication (when there is no actionable soft alarm, other types of failures are checked for); and performing a second set of actions when the status indicates invalid

upper-layer communication (when there is an actionable soft alarm, the fault management system performs different actions depending on the type of failure and whether or not the failure can be resolved automatically, column 9 line 39 - column 10 line 35)).

With respect to claims 4 and 18, Internet Protocol (IP) is a layer 3 protocol of the OSI model.

With respect to claim 5, Cerami discloses a service technician entering a failure into the proactive repair system (column 13 lines 44-52).

With respect to claim 6, Cerami discloses a service technician following a resolution to repair a fault (column 5 line 51 - column 6 line 8) and assisting a customer who has called in with a fault (column 16 lines 29-39).

With respect to claims 7, 8 and 19, Cerami discloses corrective actions being performed at the remote location, including gathering information for a service technician to perform a corrective action (column 13 line 44 - column 15 line 30, the corrective actions are interpreted to occur at any place of the network depending on the type and position of fault, and whether the fault is automatically resolvable).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 9, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cerami et al (US 6,981,039 B2) in view of Pitsoulakis (US 7,092,375 B2).

With respect to claim 2, Cerami does not disclose the CPE having a light emitting diode (LED).

Pitsoulakis discloses a DSL modem with LEDs to indicate the status and activities of various components of the access device (Figures 2-4 and column 4 line 40 - column 6 line 26).

Cerami and Pitsoulakis are analogous art because they are from the same field of endeavor of DSL networks.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the status of an LED at the end-user in the information gathered for a service technician to perform a corrective action of Cerami (column 13 line 44 - column 15 line 30, the corrective actions are interpreted to occur at any place of the network depending on the type and position of fault, and whether the fault is automatically resolvable).

The motivation for doing so would have been to use an easily identifiable indicator for a specific status when requesting information from a user.

With respect to claim 9, Cerami discloses a transceiver (Figure 2 Element 240 and Figure 4 Element 204) comprising: a connection port configured to communicate data signals from a computer (Figure 2 Element 249) positioned at a local location to a remotely located service provider device (Figure 4 Elements 236, 230 and 302); and a first status indicator, configured to indicate communicate at least a layer 3 or above communication status between the computer and the service provider device (soft alarms are failures of the logical network, Internet Protocol (IP) is a layer 3 protocol of the Open Systems Interconnect (OSI) model, column 10 lines 13-18).

Cerami does not disclose that the first status indicator is positioned at the local location.

Pitsoulakis discloses a DSL modem positioned at the local location with LEDs to indicate the status and activities of various components of the access device (Figures 2-4 and column 4 line 40 - column 6 line 26).

Cerami and Pitsoulakis are analogous art because they are from the same field of endeavor of DSL networks.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the status of an LED at the end-user in the information gathered for a service technician to perform a corrective action of Cerami (column 13 line 44 - column 15 line 30, the corrective actions are interpreted to occur at any place of the

network depending on the type and position of fault, and whether the fault is automatically resolvable).

The motivation for doing so would have been to use an easily identifiable indicator for a specific status when requesting information from a user.

With respect to claim 11, Cerami discloses wherein the service provider device is a Digital Subscriber Loop Access Multiplexer (DSLAM) (Figure 4 Elements 236 and 230).

With respect to claims 12 and 13, ATM is a layer 2 protocol of the OSI model and a wide area network protocol.

With respect to claim 14, Cerami discloses hard alarms to indicate failures of the physical network (column 10 lines 5-12, layer 1 of the OSI model is the physical layer).

With respect to claim 15, Pitsoulakis discloses one of the LEDs is a power LED (column 4 lines 56-60).

With respect to claim 16, Cerami discloses a method of digital subscriber line service maintenance, the method comprising:

detecting a digital subscriber line (DSL) related troubleshooting event at a remote service terminal that supports an end-user computer having a DSL connection at a local

site (proactive network management system 300 of Figure 3 receives alarms in indications of failure and queries the network 102, column 9 line 39 - column 10 line 35);

inquiring, from a remote location (proactive network management system 300 of Figure 3 receives alarms in indications of failure and queries the network 102, column 9 line 39 - column 10 line 35), a status of an upper-layer communication indicator (soft alarms are failures of the logical network, layers 2 and above of the Open Systems Interconnect (OSI) model, column 10 lines 13-18);

entering the status into data storage (records of the alarms are created and information gathered from the network is stored to be analyzed to determine and isolate the root cause failure, column 9 line 39 - column 10 line 35);

performing a first set of actions when the status indicates valid upper-layer communication; and performing a second set of actions when the status indicates invalid upper-layer communication (the fault management system performs different actions depending on the type of failure and whether or not the failure can be resolved automatically, column 9 line 39 - column 10 line 35)).

Cerami does not disclose the CPE having a light emitting diode (LED). Pitsoulakis discloses a DSL modem with LEDs to indicate the status and activities of various components of the access device (Figures 2-4 and column 4 line 40 - column 6 line 26).

Cerami and Pitsoulakis are analogous art because they are from the same field of endeavor of DSL networks.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the status of an LED at the end-user in the information gathered for a service technician to perform a corrective action of Cerami (column 13 line 44 - column 15 line 30, the corrective actions are interpreted to occur at any place of the network depending on the type and position of fault, and whether the fault is automatically resolvable).

The motivation for doing so would have been to use an easily identifiable indicator for a specific status when requesting information from a user.

7. Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cerami et al (US 6,981,039 B2) in view of Franklin (US 7,092,364 B1).

Cerami does not explicitly disclose the network implementing Point to Point Protocol Over Ethernet (PPPoE).

Franklin discloses a DSL network listing PPPoE as a layer 2 protocol commonly used (column 6 lines 13-51).

Cerami and Franklin are analogous art because they are from the same field of endeavor of DSL networks.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use PPPoE in the DSL network of Cerami and include PPPoE parameters in the network information collected (column 7 line 25 - column 8 line 23) for performance management.

The motivation would have been to use a well known protocol in the DSL system of Cerami).

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cerami et al (US 6,981,039 B2) in view of Pitsoulakis (US 7,092,375 B2), and further in view of Franklin (US 7,092,364 B1).

Cerami and Pitsoulakis do not explicitly disclose the network implementing Point to Point Protocol Over Ethernet (PPPoE).

Franklin discloses a DSL network listing PPPoE as a layer 2 protocol commonly used (column 6 lines 13-51).

Cerami, Pitsoulakis and Franklin are analogous art because they are from the same field of endeavor of DSL networks.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use PPPoE in the DSL network of Cerami and include PPPoE parameters in the network information collected (column 7 line 25 - column 8 line 23) for performance management.

The motivation would have been to use a well known protocol in the DSL system of Cerami).

Response to Arguments

9. Applicant's arguments filed 9/28/2007 have been fully considered but they are not persuasive.

- The Applicant argues on pages 8-11 regarding claims 1, 9, 16 that the cited prior art (Cerami, Pitsoulakis, Franklin) do not disclose that the computer is positioned at a local location to a remotely located service provider device, a first status indicator is positioned at the local location, and communicates at least a layer 3 or above communication status.

- The Examiner respectfully disagrees. Cerami discloses that the fault management system 304 includes processes that query the network to determine and isolate the root cause of the failure (Cerami, col. 10, lines 26-28). The fault management system 304 is located remotely from Customer Premises Equipment 204, which is in DSL network of fig. 2. As for the first status indicator, the combination of Cerami and Pitsoulakis teaches a first status indicator positioned at the local location as discussed above in the rejection to claim 9. As for the issue of communicating at least a layer 3 or above communication status, Cerami discloses that soft alarms 704 may be service related failures, such as Internet protocol (IP) failures (Cerami, col. 10, lines 16-17). IP protocol is a layer 3 protocol as is well known in the art.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Sol whose telephone number is (571) 272-5949. The examiner can normally be reached on M-F 7:30am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/601,078
Art Unit: 2619

Page 13

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


12/7/07
WING CHAN
SUPERVISORY PATENT EXAMINER

AMS

12/7/2007